

### CLASSIFICATION

AWS A5.28: ER70S-A1 (ER80S-G\*) EN ISO 636-A : W2Mo  
TS EN ISO 21952-A : W MoSi  
EN ISO 21952-A: W MoSi

(\*) Nearest classification

### GENERAL DESCRIPTION

It is a low alloyed TIG rod, used for the welding creep resistant 0.5 % Mo steels and fine grained steels. It gives a weld metal that is used in operating temperatures between -40°C and 500°C. It is used in the welding of steel construction applications, boiler and pressure vessels, gas pipes and turbin rotors.

**Industry:** Ship building, heavy machinery, petro-chemical, power generation, metal fabrication industry

### CHEMICAL COMPOSITION (W%) TYPICAL, WIRE

C	Si	Mn	Mo	Cr	Cu
0.085 - 0.09	0.60 - 0.70	1.15 - 1.20	0.50	< 0.15	< 0.25

### MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Yield Strength : 530 N/mm<sup>2</sup>  
Tensile Strength : 640 N/mm<sup>2</sup>  
Elongation (L=5d) : 27 %  
Impact (ISO-V) : 150 J (+20°C)  
90 J (-20°C)

### SHIELDING GASES (ISO 14175 / EN 439)

TIG : I1 - Ar (100%)  
Current Type and Polarity : DC (-)

### MATERIALS TO BE WELDED

	<b>DIN</b>	<b>EN</b>
<b>Fine Grained Steels</b>	StE 255 - StE 460 ; WStE 255 - WStE 460 -	S255N - S460N ; P255NH - P460NH S275ML ; S355M - S420M
<b>Pipe Materials</b>	StE 320.7 - StE 415.7 StE 360.7 TM - StE 480.7 TM X52, X56, X60, X65 (API 5LX)	L320 - L415NB L360MB - L485MB -
<b>Boiler and Pressure Vessel Steels</b>	15Mo3, 17Mn4, 19Mn6 22Mo4, 20MnMoNi55	16Mo3, P295GH, P310GH -
<b>Elevated Temperature Steels</b>	St 35-8, St 45-8	P235G1TH - P255G1TH
<b>Cast Steels</b>	GS-45, GS-52, GS-60 -	GE240, GE260, GE300 G20Mo5
<b>Creep Resistant Steels</b>	17MnMoV6-4, 15NiCuMoNb5 -	- 20MnMoNi4-5

### PACKING AND DIAMETER INFORMATIONS

Diameter	0.8	1.0	1.2	1.6	2.0	2.4	3.2	Tube Weight
<b>TIG ROD</b>	-	-	-	X	X	X	-	5 kg

**Liability** : All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance.  
**Fumes** : Consult information on Welding Safety Sheet, available upon request.